Projects represent the habitual context for much of the labour associated with new technology; across a range of industries, the development and implementation of new technology is typically organised as a project, planned and controlled by project managers and project management methodologies, and often subject to project management technologies which monitor and report on progress against a schedule and a plan. Projects are the standard, even universal mode of organisation used to develop, enhance, implement or deliver new technologies through a time-bounded collective endeavour (Morris, 1997). The creation of the latest Xbox or PlayStation blockbuster, the design of the latest iPhone or the implementation of a global ERP system typically relies upon practices, language, tools and methodology associated with the burgeoning field of project management. Indeed, in many technical fields, it is difficult to differentiate management as an institution from project management. For many technical experts across a range of industries, project work is inevitable if they want to exercise their expertise, and project management represents the only alternative career ladder to ever-increasing technical specialisation (Causer and Jones, 1996; Fincham, 2012). Adopting project management, as a role or as a set of responsibilities alongside technical work, frequently requires technical professionals to learn and embrace a detailed set of project management methodologies for planning, monitoring and control of their own work and that of others, enshrined in globally standardised project management bodies of knowledge. Moreover, the enactment of project management frequently relies heavily on various technologies to enact control, from the original Gantt charts and Critical Path Method (CPM) to PERT, CPM and other, more recent, sophisticated packages for planning and control of projects (Primavera, Microsoft Project, even PRINCE2) (Metcalf, 1997; Hodgson, 2002).

Only recently has research paid serious attention to the political consequences of project work; the pressure of precarious and discontinuous employment (Koch, 2004; Green, 2006; Rowlands and Handy, 2012), the intensive (often technologically-enabled) surveillance and control of project work (Metcalf, 1997; Araujo, 2009; Gleadle et al, 2012), the multiple demands of multi-project work and leadership (Garrick and Clegg, 2001; Zika-Viktorsson et al, 2006), the transfer of organisational and managerial responsibilities onto individual workers (Hodgson, 2002), the implications of such conditions for work-life balance and gender discrimination (Lindgren and Packendorff, 2006; Styhre, 2011; Lindgren et al, 2014) and the disciplining effects of project management as a career and profession (Barrett, 2001; Marks and Scholarios, 2007; Fincham, 2012; Paton et al, 2013). These and
similar themes have been explored in some depth over fifteen years in a series of workshops and publications associated with the Critical Project Studies movement (Hodgson, 2002, 2004; Hodgson and Cicmil, 2006, 2016; Cicmil et al, 2009).

In this themed section of New Technology, Work and Employment (NTWE), we build on this work to explore key issues relating to the impact and implications of project work in technology-intensive settings. The special issue addresses five interconnected themes; control, career/professionalism, identity, inequality and vulnerability.

In the first article of this themed section, Azad, Salamoun, Greenhill and Wood-Harper explore the extension of the time-space of work that happens in the wake of increased connectivity through smartphones. Suggesting that constant connectivity mediates and exacerbates control via project-intensive work practices, they report a study of how smartphones afford certain usages in consulting work and the consequences for consultants of such usages. Their paper, *Performing Projects with Constant Connectivity: Interplay of Consulting Project Work Practices and Smartphone Affordances*, concludes that constant connectivity exposes consultants to around-the-clock synchronisation of work, but also that it de-temporalises and de-spatialises work into something that may take place anywhere at any time.

In *Project managers on the edge: liminality and identity in the management of technical work*, Paton and Hodgson address the precarious career position of project managers in many technical industries, as individuals make a transition from technical specialist roles to the managerial cadre. Drawing on research in identity politics, they explore how project managers find themselves in a liminal space in two ways; firstly, between their role as technical specialist and manager, and secondly, between the dominating institutions of the profession and their employing organisation. In practice, they argue, this intensifies the insecurity and vulnerability of the project manager, as s/he seeks to balance demands to perform simultaneously as an embedded ‘local’ and as a ‘cosmopolitan’ professional.

In the third contribution to this themed section, Olofsdotter and Rasmusson draw on earlier research suggesting that externalised employment and project-based work as reinforcing the primacy of masculine norms, producing inequalities and exacerbating gender segregation patterns. In their article *Gender (in)equality Contested: externalizing employment in the construction industry* they examine whether the externalization of technological work in project-based settings increases women’s opportunities in the construction industry or result in increased segregation between male and female workers. They show that segregation is indeed happening, but contrary to expectations, it is those positioned as external technical experts that benefit from this. Concluding that externalization has, to some extent, segregated women from the lucrative work as independent
contractors and has created gender- and class-based inequalities, they indicate the need to reconceptualise the relations between employment arrangements and gender structures whilst reaffirming the primacy of masculine norms in project-based work.

Cicmil, Lindgren and Packendorff conclude the themed section with their article The project (management) discourse and its consequences: On vulnerability and un-sustainability in project-based work. It draws on empirical material from the ICT consulting sector in a critical inquiry into how project workers and projectified organisations become vulnerable to decline, decay, and exhaustion and why they continue to participate in, and so sustain, projectification. The study illuminates the implications of dominant discursive representations of project-based work and management for consultants’ ability to cope with work and how control, ambition, work satisfaction and resilience are made sense of by the project participants. Their coping with vulnerability includes allowing some elements of life to be destroyed; thus re-emerging as existentially vulnerable rather than avoiding or resisting the structures and processes that perpetuate vulnerability. The authors suggest that this and further similar studies could and should challenge projectification by raising awareness of an irreversible decline of the coping capacity of project workers in the ICT sector and challenging the addictive requirement to be resilient at any cost.

From our summary of the articles above, it is clear that this themed section addresses several interconnected themes of relevance both to critical project studies in particular and to critical research on technology-intensive work in general. Project management, as a widely dispersed work form and a set of technologies for planning and control, is present in contemporary work in many guises. It affects practices of direct managerial control and indirect discipline through career structures and professionalisation, and can serve to exacerbate inequality and vulnerability by emphasising certain notions of what is rational, effective, and legitimate whilst suppressing others. Through this section, we hope to both encourage and inform future research addressing the politics of projects in this area.

References


